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ABSTRACT

The dimensions of educational evaluation include conceptualization and technology of evaluation. The methods have been drawn from the area of educational and psychological research. The techniques of evaluation need to serve the information needs of clients, address the central value issues, deal with situational realities, meet requirements of probity, and satisfy needs for veracity. Many researchers have developed new methodology. There is a need to alert evaluators to the availability of new techniques. They should be encouraged to try out and report the results of new techniques, as well as developing new methods. The methodology must fit the needs of education. The application of evaluation was identified as a problem area because there is often insufficient staff and resources to implement systematic evaluation. There is an inability to prevent corruption by political forces. Most of an institution's evaluation efforts tend to be committed to satisfying external requirements for evaluation while ignoring internally based needs. Professional support for evaluators has strengthened and there has been substantial progress in the professionalization of educational evaluators. The analysis of educational evaluation illustrates the need to improve research, training, and financial support for this profession. (DWH)

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# A Review of Progress in Educational Evaluation

Daniel L. Stufflebeam

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## Introduction

The increased investments in education as a means of solving social problems, during the 1960's, led society to require educators to evaluate their work. In the course of responding to this outside pressure, educators expanded their evaluation efforts not only to meet society's accountability demands, but also to provide direction for improving their various projects and programs. As a consequence of this increased attention to educational evaluation thousands of persons became involved in providing specialized evaluation service; and many of them found that they were ill prepared to meet the challenge (Guba, 1969).

In attempting to identify and meet their common needs, these persons inevitably began to forge a profession of educational evaluation. This profession is visible in many forms that were not present just 10 years ago. The field's recently acquired characteristics include its journals, newsletters, and books; its organizations and conventions; its companies and institutional units; its training and research programs; and its standards. While the profession in many respects is immature, there can be no doubt that increasingly it has become an identifiable component of the broader governmental and professional establishment of education. The prediction, commonly heard in the mid 1960's, that formalized educational evaluation was a fad and would soon disappear, proved false, and there are strong indications that this field will continue to grow in importance and sophistication.

In order to foster positive growth of their field, educational evaluators should identify and attend as carefully as they can to their past successes and failures. Otherwise, they are doomed to repeat their mistakes and--equally debilitating--not to sustain and build on their

successes. Ongoing review and improvement of one's service is clearly the hallmark of a professional, and, by extension, of a profession. An important function of organizations, such as the Evaluation Network, is to foster such review and to provide direction for needed improvements.

As a modest contribution to helping EN to serve this function, I am pleased to respond to Bob Ingle's invitation to examine the history and future directions of educational evaluation. Largely, I will confine my review to the last fifteen years and will consider four dimensions that I believe are important in the examination of any profession. I will also offer a few recommendations directed at overcoming problems and building on past achievements.

## 1. Conceptualization of Evaluation

Clearly, one of the problems most evident in the literature of evaluation is the confusion and controversy over the term evaluation. A particular problem, in this regard, is that pioneers in evaluation--and especially their deciples--tended to equate evaluation to the use of some preferred technique. They linked the term to behavioral objectives (Tyler, 1949), standardized tests (Ebel, 1965), experimental designs (Campbell and Stanley, 1963), and expert reviews (National Study of Secondary School Evaluation, 1969). While these techniques undoubtedly are useful in evaluation, equating any one of them to evaluation is a serious mistake (Fisher, 1951). The consequences of using such equations are narrow assessments, feedback limited to post hoc results, impractical/inflexible procedural plans, and/or threat brought on by vesting all authority for judgment of a program in a party having little or no responsibility for acting on the recommendations.

Important additions to the suggestions for defining evaluation include

Cronbach's emphasis (1963) on evaluation as a process for guiding improvement efforts, the recommendation by the PDK Study Committee on Evaluation (Stufflebeam, et al., 1971) that evaluation should be viewed as a process for identifying and judging decision alternatives, Stake's (1967) equating of evaluation to a process of description and judgment, Scriven's (1967) emphasis on a systematic approach to assessment of worth and merit, and Eisner's (1975) characterization of evaluation as connoiseurship and criticism. These and other authors have extended and explored the meaning of evaluation, beyond mere definitions, by offering extensive theoretical formulations (Stufflebeam and Webster, 1980). And, very recently, Cronbach and Associates (1980) provided an in-depth view of the meaning of evaluation through their endichtment of current theory and practice, their call for a reformation, their positing of 95 theses, and their outlining of needed improvements. The Cronbach review revealed that the disagreement, prevalent in the late 1960's about whether evaluation should be mainly formative or summative, is still present.

A very general view, in the form of 30 articulated and illustrated standards, was provided by the Joint Committee on Standards for Educational Evaluation (1981). Their formulation, which is reflective of a common dictionary definition, is that evaluation is the systematic assessment of the worth or merit of some object. While this formulation is consistent with Scriven's position that evaluation necessarily involves value determinations, it acknowledges (particularly through its Valuational Interpretation Standard) the potential utility, under different sets of circumstances, of several different ways of assigning value meaning to findings. These options include matching outcomes to <u>valued</u> objectives, collecting and analyzing judgments offered by a wide range of interested parties, assessing the extent that attainments are responsive to assessed needs, charging the evaluator to offer

an overall assessment of worth or merit, and advising the audience for the evaluation to arrive at a judgment. The fact that the Committee did not recommend any of these over the others is reflective of the state of the art in evaluation, since respected leaders have proposed the different approaches to valuing, while research has not demonstrated the superiority of any of them.

The preceding discussion is indicative of both the substantial progress of educational evaluators in conceptualizing evaluation and the need for further work. Clearly, some members of the educational evaluation community have advanced in their flexibility and careful thinking about evaluation. On the other hand, many practitioners of educational evaluation have persisted to use some narrow concept of evaluation without developing a defensible rationale for its use. Also, there has been very little empirical research on the relative merits of different approaches to evaluation. Clearly, the field of evaluation could profit from systematic examinations of the feasibility, costs, and benefits of competing conceptualizations, and from more effective education--of the full range of participants in the educational evaluation enterprise--about what Stake (1967) has termed the "full countenance of evaluation."

## 2. Technology of Evaluation

Closely linked to the problems of conceptualizing evaluation are those linked to the technology of evaluation. The methods used most often in educational evaluation have been drawn from the area of educational and psychological research. Especially these include comparative experiments as a means of assigning students to programs, standardized tests for obtaining outcome data, and analysis of variance for examining and interpreting the obtained results. A pervasive problem is that these techniques

are poorly fitted to the characteristics and special needs of the vast majority of evaluation studies (Wolf, 1981). They require assumptions that often could not be met, and, even if they could, these techniques typically address questions other than those of primary concern to the audiences for evaluations. Moreover, the use of these techniques without regard for satisfying their required assumptions has led to the justifiable charge that evaluations frequently are no more than poor research studies. A costly consequence of this problem has been an enormous overinvestment by some of the field's most talented researchers in attempts to engineer research methods to meet the requirements of evaluation. The payoffs from these efforts have been miniscule compared to the costs of development and field testing.

Only recently have educational evaluators begun to realize that evaluation needs a respectable methodology that is built from the ground up. That is, the techniques of evaluation must be built to serve the information needs of the clients of evaluation, to address the central value issues, to deal with situational realities, to meet the requirements of probity, and to satisfy needs for veracity. While the field is far from developing a fully functional methodology that meets these requirements there have been some promising developments. These include Goal Free Evaluation (Scriven, 1974, Evers, 1980), Adversary-Advocacy teams (Stake and Gerde, 1974), Advocate Teams (Reinhard, 1972), Meta Analysis (Glass, 1976, Krol, 1978), Responsive Evaluation (Stake, 1975) and Naturalistic Evaluation (Guba and Lincoln 1981). Under the leadership of Nick Smith (1978) a panel of writers has examined the applicability to evaluation of a wide range of investigatory techniques drawn from a variety of fields. Eisner (1975) and his students have explored and developed techniques for applying the Connoiseurship model. Webster (1975) and his colleagues have operationalized the CIPP model.

Stake (1978) has adapted case study methods for use in evaluation. Roth (1977), Suarez (1980), Scriven (1977), and others have begun to make both conceptual and operational sense of the crucial yet illusive concept of needs assessment. Personnel of the Toledo Public Schools have collaborated with Bunda (1980) and Ridings (1980), to devise catalogs of evaluative criteria and associated instruments as a means of helping teachers and administrators to gear their data collection efforts to their information requirements.

Finally, a great deal of work has been done to encorporate the use of objectives referenced tests in evaluation studies. A particularly fruitful application of this latter technique is seen in curriculum embedded evaluations which provide teachers and students with an ongoing assessment of attainments in relation to the sequential objectives of a curriculum. Important work in this area is being carried out in the Chicago Schools and by the Curriculum and Instruction Department in the Dade County Schools (Chase 1980).

The efforts to expand and improve the methodology of evaluation have had some benefitical effects. There has been more acceptance of the need for alternatives to classical research methods. The proponents and critics of experimental design, as an optimal means of evaluation, have become less polarized and less emotional in their exchange about what methods are needed and what will work in educational evaluation settings (Berk, 1981).

In spite of a growing search for appropriate methods, increased communication and understanding among the leading methodologists, and the development of new techniques, the actual practice of evaluation has changed very little in the great majority of settings. Clearly, there is a need for expanded efforts to educate evaluators to the availability of new techniques, to try out and report the results of using the new techniques, and to develop additional techniques. In all of these efforts, the emphasis must be on making the methodology fit the needs of education, rather than vice versa (Kaplan, 1964).

### 3. Application of Evaluation

A third problem area involves the implementation of evaluation. Foremost in this area is insufficient staff and resources in many educational institutions to carry out systematic evaluation. Another is the inability to prevent evaluations from being corrupted by political forces. Finally, there is a widespread tendency to commit most or all of an institution's evaluation efforts to satisfying external requirements for evaluation, while leaving internally-based needs for evaluation unattended.

The consequences of these deficiencies are readily apparent in many educational institutions and are indicative of a need for concerted efforts to increase and improve the application of evaluation. Systematic evaluation of education is generally present only in the large urban school districts that have sufficient resources to maintain a staff of evaluation specialists; and even in these districts evaluation services are heavily concentrated on issuing accountability reports for special projects funded from the outside and deal mainly with district-level concerns to the exclusion of school and classroom concerns. Compared to the level of evaluation activity in urban school districts, systematic program evaluation seems almost non-existent in small school districts and in colleges and universities. Also there have been repeated reports (Brickell 1976, House 1973 , Sroufe 1977) about the vulnerability of evaluations to political sabatage.

Despite the generally negative report on institutional capabilities to conduct evaluation, there have been some important developments. Some districts have set up and operated excellent offices of evaluation (especially Saginaw, Michigan; Dallas, Texas; Atlanta, Georgia; Portland, Oregon; Los Angeles County; Cincinatti, Ohio; Lansing, Michigan; Toledo, Ohio; Austin, Texas; and Philadelphia, Pennsylvania). Also, a number of corporations--such as Abt Associates, System Development Corporation, and American Institutes for

Research--have developed and delivered high quality evaluation services to educational institutions. Recently, Cronbach and Associates (1980) suggested the use of "social problems study groups" funded over a long period of time to sustain ongoing evaluation of high priority national concerns in education and other areas. This arrangement would have the advantage of concentrating resources in long-term programmatic investigations aimed at the formulation and implementation of sound policies.

There have also been some noteable developments to deal with political realities. The Saginaw Schools (Adams 1970) developed Board of Education Policies to guide and govern evaluation in the District. The Dallas System set up a Board of Education Committee on Evaluation and used it to help focus district evaluation efforts on Board information needs and to increase the Board members' use of evaluation. While such Board Committees have been controversial (D. Magazine, 1980), the Dallas experience in this realm merits careful study.

One of the most promising developments towards increasing the use of evaluation at the school level is seen in Atlanta's assignment of dual roles to evaluators; each evaluator serves a certain technical function such as statistical analysis and a general liaison function to a sample of schools. In addition, each school maintains a curriculum improvement committee which includes the assigned district level evaluator and is charged to conduct evaluation to identify and address curriculum improvement needs in the school. This arrangement provides for a strong central evaluation function and guidance and technical backup for school level evaluation.

The problem of serving both school and district evaluation functions is peculiar to American Public Education. In other countries public schools report directly to a central governmental authority and are not grouped into

districts. Some of the most advanced work in school level evaluation is to be seen in the private schools of the United States and in the private and government supported schools in Victoria, Australia.

A final point worth noting is that several studies have been done or are in progress to illuminate and assess the strengths and weaknesses of evaluation capabilities and practices in school districts (Chase, 1980, Kennedy 1980, Alkin 1979, and King 1981). These are an important resource for taking stock of what has worked, what hasn't, and what yet needs to be done to increase the capabilities of educational institutions to carry out vital evaluation functions. Further studies of evaluation practice at the school level aimed at assessing the state of the art, in general, and promising evaluation practices, in particular, could provide principals and teachers with valuable information by which to improve their use of evaluation.

### 4. Professional Support for Evaluation

As the field of educational evaluation has grown, it has experienced needs that are common to emerging professions. While the field has advanced considerably in dealing with these needs, it is instructive to consider the great deficiencies in this area that existed just 15 years ago.

At that time, practitioners of educational evaluation faced an identify crisis. They weren't sure whether they should try to be researchers, testers, administrators, teachers, or philosophers. They were unclear about what special qualifications they should possess. There was no professional organization that concentrated on their particular problems. There were no specialized journals through which they could exchange information about their work. There was essentially no literature about educational evaluation. There was a paucity of preservice and inservice training opportunities in evaluation. And there were no articulated standards of good practice, except for those confined to educational and psychological tests.

The effects of these deficiencies were apparent to any one who looked closely at educational evaluation during the late 1960's. The field was amorphous and fragmented. Many evaluations were carried out by untrained personnel; others were performed by research methodologists who tried to force educational situations to fit their methods (Guba 1966). Evaluation studies were characterized by great confusion, anxiety, and animosity. In general, the budding field of educational evaluation had little stature and political clout.

Against this backdrop, the progress of educational evaluators in professionalizing their field during the 1970's, appears to be substantial. Educational Evaluation and Policy Analysis, Studies in Evaluation, CEDR Quarterly, and Evaluation News have proved to be excellent media for recording and disseminating information about progress in educational evaluation. Books and monographs by Popham (1974), Provus (1971), Bloom, Hastings, and Madaus (1971), Scriven (1980), Worthen and Sanders (1973), Glass (1976), and many others have provided an enormous amount of information about the educational evaluation enterprise. The May 12th group, Division H of AERA, the Evaluation Network, and the Evaluation Research Society of America have afforded excellent opportunities for professional exchange among persons concerned with the evaluation of education and other social programs. Many universities have begun to offer at least one course in evaluation methodology (as distinct from research methodology), and a few--such as the University of Illinois, Stanford University, Boston College, UCLA, the University of Minnesota, and Western Michigan University--have developed graduate programs in evaluation. For seven years the U.S. Office of Education has sponsored a national program of inservice training in evaluation of special education (Brinkerhoff, in press), and several professional

organizations have offered workshops and institutes on various evaluation topics. A few centers have been established and maintained to conduct research and development on evaluation; these include the evaluation unit of the Northwest Regional Educational Laboratory, the Center for the Study of Evaluation at UCLA, the Stanford Evaluation Consortium, the Center for Instructional Research and Curriculum Evaluation at the University of Illinois, and the Evaluation Center at Western Michigan University. The state of Louisiana has established a policy and program for certifying evaluators (Peck 1981), and Dick Johnson (1980), has issued a first draft of a directory of evaluators and evaluation agencies. Increasingly, the field has looked to meta evaluation (Scriven 1975, Stufflebeam 1978) as a means of assuring and checking the quality of evaluations. Finally, a joint committee (Joint Committee, 1981, a.), appointed by 12 professional organizations has issued a comprehensive set of standards for judging evaluations of educational programs, projects, and materials, and has established a mechanism (Joint Committee, 1981, b.) by which to review and revise the Standards and assist the field to use them. In addition, several other sets of standards with relevance for educational evaluation (see the May, 1981 issue of Evaluation News) have been issued.

This substantial professional development in educational evaluation has produced mixed results. While there is undoubtedly better and more communication in the field, there has also been an enormous amount of "chatter" (Cronbach, 1981). While progress has been made through better and more training and certification efforts to ensure that institutions can obtain services from qualified evaluators, there are worries (Stake, 1981) that this movement may result in a club that narrows the practice of evaluation and excludes persons from joining it for no good reason. The cooperation among professional organizations concerned with educational evaluation, fostered by the Joint

Committee on Standards for Educational Evaluation, is a promising but fragile arrangement for promoting the conduct and use of high quality evaluation work. And the creation of new professional organizations has increased communication and reduced some of the fragmentation in the evaluation field; but fairly sharp divisions between Division H, the Evaluation Network, and the Evaluation Research Society continue to exist.

In order to sustain gains and work on solving some of the persistent problems in the professional support area, several moves are in order. Editorial boards of evaluation journals should review and tighten their criteria for choosing articles and, through more careful refereeing, should attempt to increase the proportion of high quality published material. Annual "evaluation circuses" in which evaluators of education and other social program areas meet together without giving up their primary evaluation organization should be continued; and Division H of AERA should be encouraged to participate along with EN and ERS. The organizations and persons with professional interests in and allegiance to the field of educational evaluation should sustain the work of the Joint Committee and use it to promote better conduct and use of evaluation and improved credibility for the profession. Concerted efforts should be made to encorporate evaluation training into the professional preparation programs of educators, especially educational administrators. The major evaluation organizations must develop and sell a strong case for financial support of the educational evaluation enterprise. Considering all they spend on evaluation, government agencies should continue to invest in efforts to improve the evaluation enterprise, including research, development, training, and professional support. Hopefully, private foundations will see the wisdom of helping to fund the improvement of evaluation, since sound evaluation is essential for improving education.

## Closing

The preceding review portrays educational evaluation as a dynamic, yet immature profession. The gains in this field over the past 15 years are impressive; but there are many obvious deficiencies and insufficient evidence about impacts on teaching and learning. Strengths and weaknesses have been outlined along with suggestions for improvement in four areas: the conceptualization of evaluation, techniques, applications, and professional support. The pervasive theme in this analysis points to needs to improve research, training, and financial support for educational evaluation. However, leaders of the educational evaluation profession must ensure that efforts to improve this profession are geared not to serve the private and corporate needs of evaluators, but the evaluation service needs of educators and their clients. Ultimately the value of educational evaluation must be judged in terms of its contributions to improving learning, teaching, and educational administration. All of us in the educational evaluation business would do well to remember and use this basic principle to guide and examine our work.

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